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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	SEP 09	CA/CAplus records now contain indexing from 1907 to the present
NEWS 4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS 5	Jul 21	Identification of STN records implemented
NEWS 6	Jul 21	Polymer class term count added to REGISTRY
NEWS 7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS 8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS 9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS 11	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS 12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS 13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS 14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS 15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS 16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Righ Truncation
NEWS 17	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS 18	SEP 22	DIPPR file reloaded
NEWS 19	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS 20	SEP 29	DISSABS now available on STN

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

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FILE 'HOME' ENTERED AT 15:02:18 ON 29 SEP 2003

=> file medline, uspatful, dgene, embase, wpids, biosis
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.42       0.42

FILE 'MEDLINE' ENTERED AT 15:03:32 ON 29 SEP 2003

FILE 'USPATFULL' ENTERED AT 15:03:32 ON 29 SEP 2003
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FILE 'BIOSIS' ENTERED AT 15:03:32 ON 29 SEP 2003
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=> s fermentation () xylose () ethanol
L1            4 FERMENTATION (W) XYLOSE (W) ETHANOL

=> d l1 ti abs ibib tot

L1   ANSWER 1 OF 4  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
TI   Yeast which ferments xylose to ethanol - comprising xylitol reductase,
     xylitol dehydrogenase and xylulokinase genes integrated at each of its
     multiple reiterated ribosomal DNA sites.
AN   1997-558974 [51]   WPIDS
AB   WO   9742307 A UPAB: 19991020
     Novel yeast which ferments xylose to ethanol, comprises: (a) xylose
     reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) genes
     integrated at each of its multiple reiterated ribosomal DNA sites; (b)
     multiple copies of exogenous DNA, including XR, XD, and XK genes, fused to
     non-glucose inhibited promoters integrated into its chromosomal DNA, where
     the yeast simultaneously ferments glucose and xylose to ethanol; or (c)
     multiple copies of an introduced DNA containing XR, XD and XK genes, where
     the yeast ferments xylose to ethanol, where the yeasts of (b) and (c)
     retain their capacity for fermenting xylose to ethanol when cultured under
     non-selective conditions for at least 20 generations.
          USE - The methods can produce yeast, which even upon culture in
     non-selective medium for multiple generations, e.g. up to 20, retain their
     full capability to ferment xylose to ethanol.
     Dwg.0/12
ACCESSION NUMBER:     1997-558974 [51]   WPIDS
DOC. NO. CPI:         C1997-178545
TITLE:                Yeast which ferments xylose to ethanol - comprising
                      xylitol reductase, xylitol dehydrogenase and xylulokinase
                      genes integrated at each of its multiple reiterated
                      ribosomal DNA sites.
DERWENT CLASS:        D16 D17 E17 H06
INVENTOR(S):          CHEN, Z; HO, N W Y
PATENT ASSIGNEE(S):   (PURD) PURDUE RES FOUND
COUNTRY COUNT:        76
PATENT INFORMATION:

     PATENT NO    KIND DATE     WEEK      LA   PG
     ---------------------------------------------
```

WO 9742307 A1 19971113 (199751)* EN 66
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU
AU 9728301 A 19971126 (199813)
EP 898616 A1 19990303 (199913) EN
R: AT BE DE DK ES FI FR GB GR IE IT NL PT SE
CN 1225125 A 19990804 (199949)
JP 2000509988 W 20000808 (200043) 50
MX 9809223 A1 19990701 (200061)
AU 731102 B 20010322 (200122)
BR 9710963 A 20010731 (200146)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9742307	A1	WO 1997-US7663	19970506
AU 9728301	A	AU 1997-28301	19970506
EP 898616	A1	EP 1997-922698	19970506
		WO 1997-US7663	19970506
CN 1225125	A	CN 1997-196195	19970506
JP 2000509988	W	JP 1997-540153	19970506
		WO 1997-US7663	19970506
MX 9809223	A1	MX 1998-9223	19981105
AU 731102	B	AU 1997-28301	19970506
BR 9710963	A	BR 1997-10963	19970506
		WO 1997-US7663	19970506

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9728301	A	Based on	WO 9742307
EP 898616	A1	Based on	WO 9742307
JP 2000509988	W	Based on	WO 9742307
AU 731102	B	Previous Publ.	AU 9728301
		Based on	WO 9742307
BR 9710963	A	Based on	WO 9742307

PRIORITY APPLN. INFO: US 1996-16865P 19960506

L1 ANSWER 2 OF 4 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Prodn. of a prod. using a bi layer pellet contg. an immobilised enzyme system - used in the simultaneous isomerisation and fermentation of xylose to ethanol.
AN 1995-122845 [16] WPIDS
CR 1993-344962 [43]
AB US 5397700 A UPAB: 19950502
A prod (I) is formed using bilayer pellets (outer layer of a porous polymer material (II) contg immobilised urease (III); inner core of (II) contg an immobilised enzyme (IV) other than (III) that acts on a substrate to afford (I) as follows: (a) the pellets are dispersed in a bulk soln contg urea and the substrate, and with an acidic pH; (b) (III) reacts with urea as it diffuses into the outer layer to furnish NH3 that consumes H+ diffusing into the inner core from the bulk soln to provide (IV) in the inner core with a pH higher than the acidic pH suitable for reacting with the substrate as it diffuses into the inner core; and (c) (IV) reacts with the substrate as it diffuses in to furnish (I).
ADVANTAGE - The method is partic suitable for the isomerisation of xylose to xylulose in the pellets, and the simultaneous fermentation of produced diffused xylulose (and glucose) to EtOH in the bulk soln EtOH is

a known liq fuel in gasoline additives, etc.
Dwg.0/2

ACCESSION NUMBER: 1995-122845 [16] WPIDS
CROSS REFERENCE: 1993-344962 [43]
DOC. NO. CPI: C1995-056046
TITLE: Prodn. of a prod. using a bi layer pellet contg. an immobilised enzyme system - used in the simultaneous isomerisation and fermentation of xylose to ethanol.
DERWENT CLASS: D16 E17 H06
INVENTOR(S): BYERS, J P; FOURNIER, R L; VARANASI, S
PATENT ASSIGNEE(S): (UYTO-N) UNIV TOLEDO
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5397700	A	19950314	(199516)*		9

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 5397700	A	CIP of	US 1991-785938	19911031
			US 1993-125546	19930923

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 5397700	A	CIP of	US 5254468

PRIORITY APPLN. INFO: US 1991-785938 19911031; US 1993-125546 19930923

L1 ANSWER 3 OF 4 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Bi layer pellet contg. immobilised xylose isomerase and urease - used for simultaneous isomerisation and fermentation of xylose to ethanol.
AN 1993-344962 [43] WPIDS
CR 1995-122845 [16]
AB US 5254468 A UPAB: 19950508
Bilayered immobilised enzyme pellet comprises: (a) a core consisting of xylose isomerase (I) immobilised onto a porous polymer material (II); and (b) an outer layer consisting of urease (III) immobilised onto a porous polymer material (IV).

Pref. (IV) is polyacrylamide. The pellet is prepd. by: immobilising (I) onto (II); mixing the reulsting particles with H2O, (III), a monomer, a crosslinking agent, and a polymerisation initiator; keeping the suspension at 0-4 deg. C.; adding PhMe, CHCI3 and a surfactant; and agitating the produced aq. hydrophobic phase at 0-4 deg. C. under N2 to effect polymerisation of the monomer to form a thin polymer coating (contg. immobilised (III)) on the (I)-contg. particles.

USE/ADVANTAGE - The process allows the simultaneous isomerisation of xylose to xylulose, and the immediate fermentation of the latter cpd. to EtOH to be effected at the optimum (but different) pH values. In addn. feeds contg. xylose and glucose (i.e. as obtd. from lignocellulose) may also be used.
Dwg.0/2
Dwg.0/2

ACCESSION NUMBER: 1993-344962 [43] WPIDS
CROSS REFERENCE: 1995-122845 [16]
DOC. NO. CPI: C1993-152813
TITLE: Bi layer pellet contg. immobilised xylose isomerase and urease - used for simultaneous isomerisation and fermentation of xylose to ethanol.

DERWENT CLASS: D16 D17 E17
INVENTOR(S): BYERS, J P; FOURNIER, R L; VARANASI, S
PATENT ASSIGNEE(S): (UYTO-N) UNIV TOLEDO
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5254468	A	19931019	(199343)*		8

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5254468	A	US 1991-785938	19911031

PRIORITY APPLN. INFO: US 1991-785938 19911031

L1 ANSWER 4 OF 4 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Fermenting D-xylose to ethanol - using specific yeast mutants with high conversion efficiency.
AN 1982-04576J [48] WPIDS
AB WO 8204068 A UPAB: 19930915
Direct fermentation of D-xylose (I) to ethanol comprises inoculating a medium contg. nutrients and (I) with a yeast able to convert (I) to ethanol with bioconversion yield at least 50%. The mixt. is fermented until (I) conversion to ethanol of at least 50 (pref. 80)% is achieved. Pref. the yeast mutants Candida sp. XF217 or Saccharomyces cerevisiae SCXF 138 (both claimed as new microorganisms) are used. The medium contains 1-40 (5-30) wt.-vol.% (I) initially and is fermented aerobically or anaerobically at 22-40 (30) deg.C and pH 4-8 (about 6). The medium may also contain D-glucose (also converted) e.g. a cellulose or hemicellulose hydrolysate.

Hemicellulose waste materials e.g. sugar cane bagasse, are available in large quantities and then mutants efficiently convert the sugar formed when they are hydrolysed.

ABEQ US 4511656 A UPAB: 19930915
Prodn. of ethanol comprises fermentation of D-xylose with a parent yeast strain of Candida sp. or Saccharomyces cerevisiiae species, in the presence of suitable nutrients at pH about 4-8 pref. 6, and at 22-40 pref 30 deg under aerobic conditions; such that at least 50% pref. 80% of the xylose is converted to EtOH.

ADVANTAGE - Process utilises cellulose hydrolysate and/or hemicellulose hydrolysate as a nutrient medium, with conversion of both D-glucose and D-xylose.

ABEQ EP 66396 B UPAB: 19930915
A process for the direct fermentation of D-xylose to ethanol which comprises incoluating a medium comprising growth nutrients and D-xylose with a yeast mutant having an ability to ferment D-xylose to ethanol with a bioconversion yield of at least 50%, permitting the inoculated medium to ferment for a period of time sufficient to achieve a conversion of D-xylose to ethanol of at least 50% and recovering the ethanol so produced as product.

ACCESSION NUMBER: 1982-04576J [48] WPIDS
TITLE: Fermenting D-xylose to ethanol - using specific yeast mutants with high conversion efficiency.
DERWENT CLASS: D16 D17 E17
INVENTOR(S): GONG, C S
PATENT ASSIGNEE(S): (PURD) PURDUE RES FOUND; (PURO) PUROLATOR INC
COUNTRY COUNT: 20
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

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     -----------------------------------------
     WO 8204068     A  19821125 (198248)* EN   24
         W: AU BR DK FI JP NO
     EP 66396       A  19821208 (198250)  EN
         R: AT BE CH DE FR GB IT LI LU NL SE
     US 4368268     A  19830111 (198305)
     ZA 8203350     A  19830427 (198329)
     US 4511656     A  19850416 (198518)
     EP 66396       B  19850821 (198534)  EN
         R: AT BE CH DE FR GB IT LI LU NL SE
     DE 3265585     G  19850926 (198540)
     CA 1207257     A  19860708 (198632)

APPLICATION DETAILS:

     PATENT NO   KIND                    APPLICATION      DATE
     ------------------------------------------------------------
     EP 66396       A                    EP 1982-302474   19820514
     US 4368268     A                    US 1982-376731   19820511


PRIORITY APPLN. INFO: US 1981-263925   19810515; US 1981-363925
                      19810515; US 1982-376731   19820511


=> d his

     (FILE 'HOME' ENTERED AT 15:02:18 ON 29 SEP 2003)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS' ENTERED AT
     15:03:32 ON 29 SEP 2003
L1             4 S FERMENTATION () XYLOSE () ETHANOL

=> s yeast () xylose () ethanol
L2             0 YEAST (W) XYLOSE (W) ETHANOL

=> s fermentation of xylose to ethanol
L3            59 FERMENTATION OF XYLOSE TO ETHANOL

=> s genes integrated () multiple reiterated ribosomal DNA
L4             0 GENES INTEGRATED (W) MULTIPLE REITERATED RIBOSOMAL DNA

=> s ribosomal DNA
L5         18161 RIBOSOMAL DNA

=> s l5 and reiterated
L6            58 L5 AND REITERATED

=> s l6 and integrated genes
L7             0 L6 AND INTEGRATED GENES

=> s l7 and genes integrated
L8             0 L7 AND GENES INTEGRATED

=> s l6 and genes
L9            41 L6 AND GENES

=> s l9 and integrat?
L10           12 L9 AND INTEGRAT?

=> d l10 ti abs ibib tot

L10  ANSWER 1 OF 12  USPATFULL on STN
TI     Method for normalizing the relative intensities of detection signals in
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hybridization arrays

AB The present invention relates to rRNA-derived cDNA used as an internal standard or control to achieve normalization of hybridization signal detection in microarray biochip technology. Analysis of data obtained from a laser scanner during DNA microarray experiments first requires image processing. However, the data generated for the arrayed **genes** must be normalized before differentially expressed **genes** can be identified. Normalization is necessary to compensate for differences in labelling and detection efficiencies for the labels and for differences in the quantity of starting RNA from the samples examined in the assay. Because of its relatively invariant expression across tissues and treatments, 18S and 28S ribosomal RNAs are ideal internal controls for quantitative RNA analysis. A way to circumvent the technical difficulties of using ribosomal RNA as a control, because of its overabundance relative to that of other RNAs, is described and claimed in the present application. Improved methods, arrays, and kits comprising arrays and free unlabelled ribosomal probes, are objects of this invention. The unlabelled ribosomal probes are used to compete out the excess or ribosomal nucleics present in a sample wherein all cDNA species of the sample are labelled before being placed in contact with the arrays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:213648 USPATFULL

TITLE: Method for normalizing the relative intensities of detection signals in hybridization arrays

INVENTOR(S): Larose, Anne-Marie, Montreal, CANADA
LeBlanc, Benoit, Montreal, CANADA
Camato, Rino, St-Leonard, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003148286	A1	20030807	
APPLICATION INFO.:	US 2002-30846	A1	20020719	(10)
	WO 2001-CA1860		20011221	

	NUMBER	DATE
PRIORITY INFORMATION:	CA 2000-2327527	20001227

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 2959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 12 USPATFULL on STN

TI Identification of **genes**

AB A method for identifying a microorganism having a reduced adaptation to a particular environment comprising the steps of:

(1) providing a plurality of microorganisms each of which is independently mutated by the insertional inactivation of a gene with a nucleic acid comprising a unique marker sequence so that each mutant contains a different marker sequence, or clones of the said microorganism;

(2) providing individually a stored sample of each mutant produced by step (1) and providing individually stored nucleic acid comprising the unique marker sequence from each individual mutant;

(3) introducing a plurality of mutants produced by step (1) into the said particular environment and allowing those microorganisms which are able to do so to grow in the said environment;

(4) retrieving microorganisms from the said environment or a selected part thereof and isolating the nucleic acid from the retrieved microorganisms;

(5) comparing any marker sequences in the nucleic acid isolated in step (4) to the unique marker sequence of each individual mutant stored as in step (2); and

(6) selecting an individual mutant which does not contain any of the marker sequences as isolated in step (4).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:19054 USPATFULL
TITLE:	Identification of **genes**
INVENTOR(S):	Holden, David William, London, UNITED KINGDOM Shea, Jacqueline Elizabeth, High Wycombe, UNITED KINGDOM Hensel, Michael, Munchen, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S):	Imperial College Innovations Limited, London, UNITED KINGDOM (non-U.S. corporation) Microscience Limited, Berkshire, UNITED KINGDOM (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6342215	B1	20020129
APPLICATION INFO.:	US 1998-201945		19981201 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 637759, now patented, Pat. No. US 5876931		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-24921	19941209
	GB 1995-1881	19950131
	GB 1995-9239	19950505

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Schwartzman, Robert A.
LEGAL REPRESENTATIVE:	Holland & Knight LLP
NUMBER OF CLAIMS:	21
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	119 Drawing Figure(s); 112 Drawing Page(s)
LINE COUNT:	7399

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 12 USPATFULL on STN

TI Identification of **genes**

AB A method for identifying a microorganism having a reduced adaptation to a particular environment comprising the steps of:

(1) providing a plurality of microorganisms each of which is independently mutated by the insertional inactivation of a gene with a nucleic acid comprising a unique marker sequence so that each mutant contains a different marker sequence, or clones of the said microorganism;

(2) providing individually a stored sample of each mutant produced by step (1) and providing individually stored nucleic acid comprising the unique marker sequence from each individual mutant;

(3) introducing a plurality of mutants produced by step (1) into the said particular environment and allowing those microorganisms which are able to do so to grow in the said environment;

(4) retrieving microorganisms from the said environment or a selected part thereof and isolating the nucleic acid from the retrieved microorganisms;

(5) comparing any marker sequences in the nucleic acid isolated in step (4) to the unique marker sequence of each individual mutant stored as in step (2); and

(6) selecting an individual mutant which does not contain any of the marker sequences as isolated in step (4).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2000:7170 USPATFULL		
TITLE:	Identification of **genes**		
INVENTOR(S):	Holden, David William, London, United Kingdom		
PATENT ASSIGNEE(S):	Imperial College Innovations Limited, London, United Kingdom (non-U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6015669		20000118
APPLICATION INFO.:	US 1997-871355		19970609 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1995-GB2875, filed on 11 Dec 1995		
	NUMBER		DATE
PRIORITY INFORMATION:	GB 1994-24921		19941209
	GB 1995-1881		19950131
	GB 1995-9239		19950505
	WO 1995-GB2875		19951211
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Marschel, Ardin H.		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Arnall Golden & Gregory, LLP		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	116 Drawing Figure(s); 112 Drawing Page(s)		
LINE COUNT:	7898		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 12 USPATFULL on STN

TI Identification of **genes**

AB A method for identifying a microorganism having a reduced adaptation to a particular environment comprising the steps of:

(1) providing a plurality of microorganisms each of which is independently mutated by the insertional inactivation of a gene with a nucleic acid comprising a unique marker sequence so that each mutant contains a different marker sequence, or clones of the said microorganism;

(2) providing individually a stored sample of each mutant produced by step (1) and providing individually stored nucleic acid comprising the unique marker sequence from each individual mutant;

(3) introducing a plurality of mutants produced by step (1) into the said particular environment and allowing those microorganisms which are able to do so to grow in the said environment;

(4) retrieving microorganisms from the said environment or a selected part thereof and isolating the nucleic acid from the retrieved microorganisms;

(5) comparing any marker sequences in the nucleic acid isolated in step (4) to the unique marker sequence of each individual mutant stored as in step (2); and

(6) selecting an individual mutant which does not contain any of the marker sequences as isolated in step (4).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1999:27395 USPATFULL			
TITLE:	Identification of **genes**			
INVENTOR(S):	Holden, David William, London, United Kingdom			
PATENT ASSIGNEE(S):	RPMS Technology Limited, London, United Kingdom (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5876931		19990302	
	WO 9617951		19760613	
APPLICATION INFO.:	US 1997-637759		19970719	(8)
	WO 1995-GB2875		19951211	
			19970719	PCT 371 date
			19970719	PCT 102(e) date
	NUMBER		DATE	
PRIORITY INFORMATION:	GB 1994-24921		19941209	
	GB 1995-1881		19950131	
	GB 1995-9239		19950505	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Degen, Nancy			
ASSISTANT EXAMINER:	Schwartzman, Robert			
LEGAL REPRESENTATIVE:	Arnall Golden & Gregory LLP			
NUMBER OF CLAIMS:	31			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	119 Drawing Figure(s); 112 Drawing Page(s)			
LINE COUNT:	6165			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 5 OF 12 USPATFULL on STN

TI Artificial chromosome vector

AB The present invention relates to a recombinant DNA molecule which contains the telomere and, optionally, the centromere of a higher eukaryote, particularly a plant, the telomere itself, the centromere itself, a method of producing a polypeptide in a recipient cell which utilizes said recombinant DNA molecule, host cells transformed with said recombinant molecule, and uses for said recombinant molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	93:104847 USPATFULL		
TITLE:	Artificial chromosome vector		
INVENTOR(S):	Richards, Eric J., Lloyd Harbor, NY, United States Ausubel, Frederick M., Newton, MA, United States		
PATENT ASSIGNEE(S):	The General Hospital Corporation, Boston, MA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5270201		19931214

APPLICATION INFO.: US 1992-860585 19920330 (7)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1991-742554, filed on 9 Aug 1991, now abandoned which is a continuation of Ser. No. US 1989-404525, filed on 8 Sep 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-172467, filed on 24 Mar 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Carter, Philip W.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 23 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 1901
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 6 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
AN AAV12824 DNA DGENE
AB This sequence represents an amplification primer for the yeast 5S rDNA sequence. The amplified sequence can be used in the yeast of the invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.
ACCESSION NUMBER: AAV12824 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506
PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast 5S rDNA sequence.

L10 ANSWER 7 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
AN AAV12829 DNA DGENE
AB This sequence is an amplification primer for the yeast Tn903 kanamycin resistance gene. The amplified sequence can be used in the yeast of the

invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.

ACCESSION NUMBER: AAV12829 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506
PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast Tn 903 kanamycin resistance gene.

L10 ANSWER 8 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
AN AAV12828 DNA DGENE
AB This sequence is an amplification primer for the yeast Tn903 kanamycin resistance gene. The amplified sequence can be used in the yeast of the invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.

ACCESSION NUMBER: AAV12828 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506

PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast Tn 903 kanamycin resistance gene.

L10 ANSWER 9 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal** **DNA** sites
AN AAV12827 DNA DGENE
AB This sequence is an amplification primer for the yeast Tn903 kanamycin resistance gene. The amplified sequence can be used in the yeast of the invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.
ACCESSION NUMBER: AAV12827 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506
PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast Tn 903 kanamycin resistance gene.

L10 ANSWER 10 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal** **DNA** sites
AN AAV12826 DNA DGENE
AB This sequence is an amplification primer for the yeast Tn903 kanamycin resistance gene. The amplified sequence can be used in the yeast of the invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at

least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.

ACCESSION NUMBER: AAV12826 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506
PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast Tn 903 kanamycin resistance gene.

L10 ANSWER 11 OF 12 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
AN AAV12825 DNA DGENE
AB This sequence represents an amplification primer for the yeast 5S rDNA sequence. The amplified sequence can be used in the yeast of the invention, which ferments xylose to ethanol. The yeast comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol; the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations. The yeast is produced by **integrating** multiple copies of exogenous DNA into **reiterated** chromosomal DNA of cells. The yeast produced by the **integration** method, even upon culture in non-selective medium for multiple generations (e.g. up to 20), retain their full capability to ferment xylose to ethanol.

ACCESSION NUMBER: AAV12825 DNA DGENE
TITLE: Yeast which ferments xylose to methanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites
INVENTOR: Chen Z; Ho N W Y
PATENT ASSIGNEE: (PURD) PURDUE RES FOUND.
PATENT INFO: WO 9742307 A1 19971113 66p
APPLICATION INFO: WO 1997-US7663 19970506
PRIORITY INFO: US 1996-16865 19960506
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1997-558974 [51]
DESCRIPTION: Primer for yeast 5S rDNA sequence.

L10 ANSWER 12 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
TI Yeast which ferments xylose to ethanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites.

AN 1997-558974 [51] WPIDS
AB WO 9742307 A UPAB: 19991020
Novel yeast which ferments xylose to ethanol, comprises: (a) xylose reductase (XR), xylitol dehydrogenase (XD) and xylulokinase (XK) **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites; (b) multiple copies of exogenous DNA, including XR, XD, and XK **genes**, fused to non-glucose inhibited promoters **integrated** into its chromosomal DNA, where the yeast simultaneously ferments glucose and xylose to ethanol; or (c) multiple copies of an introduced DNA containing XR, XD and XK **genes**, where the yeast ferments xylose to ethanol, where the yeasts of (b) and (c) retain their capacity for fermenting xylose to ethanol when cultured under non-selective conditions for at least 20 generations.

USE - The methods can produce yeast, which even upon culture in non-selective medium for multiple generations, e.g. up to 20, retain their full capability to ferment xylose to ethanol.

Dwg.0/12

ACCESSION NUMBER: 1997-558974 [51] WPIDS
DOC. NO. CPI: C1997-178545
TITLE: Yeast which ferments xylose to ethanol - comprising xylitol reductase, xylitol dehydrogenase and xylulokinase **genes integrated** at each of its multiple **reiterated ribosomal DNA** sites.
DERWENT CLASS: D16 D17 E17 H06
INVENTOR(S): CHEN, Z; HO, N W Y
PATENT ASSIGNEE(S): (PURD) PURDUE RES FOUND
COUNTRY COUNT: 76
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9742307	A1	19971113	(199751)*	EN	66
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN YU					
AU 9728301	A	19971126	(199813)		
EP 898616	A1	19990303	(199913)	EN	
R: AT BE DE DK ES FI FR GB GR IE IT NL PT SE					
CN 1225125	A	19990804	(199949)		
JP 2000509988	W	20000808	(200043)		50
MX 9809223	A1	19990701	(200061)		
AU 731102	B	20010322	(200122)		
BR 9710963	A	20010731	(200146)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9742307	A1	WO 1997-US7663	19970506
AU 9728301	A	AU 1997-28301	19970506
EP 898616	A1	EP 1997-922698	19970506
		WO 1997-US7663	19970506
CN 1225125	A	CN 1997-196195	19970506
JP 2000509988	W	JP 1997-540153	19970506
		WO 1997-US7663	19970506
MX 9809223	A1	MX 1998-9223	19981105
AU 731102	B	AU 1997-28301	19970506
BR 9710963	A	BR 1997-10963	19970506
		WO 1997-US7663	19970506

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9728301	A	Based on	WO 9742307
EP 898616	A1	Based on	WO 9742307
JP 2000509988	W	Based on	WO 9742307
AU 731102	B	Previous Publ.	AU 9728301
		Based on	WO 9742307
BR 9710963	A	Based on	WO 9742307

PRIORITY APPLN. INFO: US 1996-16865P 19960506